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The Framework for Investigating Globalization's Impact on Health Systems

Abstract

RESEARCH OBJECTIVE: This perspective article aims to identify the main channels through which globalization influences health systems.

THE PROBLEM AND RESEARCH METHODS: The research problem concerns the ways globalization influences the demand and the supply side of health systems. Meta-analysis was implemented and five databases were explored for the period 2005–2020.

THE PROCESS OF ARGUMENTATION: The introduction presents the methodology and the added value of the article. The main body of the article presents globalization's impact on the supply side (a flow of pharmaceuticals and medical equipment, new health care providers and new services, medical tourism, and transnational regulations leading to better access to health care) and demand side of health systems (easier access to hazardous goods and services, faster spread of infectious diseases, faster development of civilization diseases, and healthism) followed by discussion and conclusions.

RESEARCH RESULTS: The article offers a framework for investigating globalization's impact on health systems where the supply and demand side of health systems are indicated.

CONCLUSIONS, INNOVATIONS, AND RECOMMENDATIONS: The article concludes that the flows of goods, services, and people are the leading

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channels of the impact of globalization on health systems. The negative effects of the current SARS-CoV-2 pandemic notwithstanding, in the long run, the influence of globalization on health systems is *per saldo* positive.

Keywords:
globalization, globalization's impact on health,
health care systems, migrations, medical tourism.

INTRODUCTION

In the time of the SARS-CoV-2 pandemic, the issue of globalization's impact on health requires further elaboration. Named also COVID-19, the current pandemic dominates not only public debates but also academic inquiries[1]. The effects of the inflow of globalization on public health and health systems have been researched over the last decades. To measure such an influence is difficult partly due to the heterogeneity of both phenomena: globalization and health.

Globalization does not have one definition (Roudometof, 2021). It is understood in this article as a dynamic multidimensional process pushed by technological progress and carried out through free trade, liberal principles of capital transfer, intensive migration of people, and exchange of ideas. The cornerstone of globalization is the development of transport, telecommunications, and the fast flow of information (big data). Globalization has a significant impact on the environment (pollution resulting from the massification of passenger and freight transport, climate changes, intensive urbanization, etc.), and people (in a broadly defined economic, social and political context). *Ipso facto* globalization affects health. The complexity and multidimensionality of globalization have far-reaching consequences concerning its measurement and assessment. Since globalization comprises multiple, interacting policy dynamics, reliance on evidence

1 A quick inquiry (using the keyword: COVID-19) in GoogleScholar on December 17, 2021, resulted in about 4 430 000 publications including about 105 000 published in 2021 alone. A similar search in ScienceDirect gave 98 539 results (of which 42 112 were research articles) and 66 606 were published in 2021.

from multiple disciplines and research methodologies is required (Labonté, 2018). This in turn is a considerable challenge.

Health also does not possess one commonly accepted definition. Here, a slightly modified WHO definition of health is used and is understood as a state of physical, mental and social well-being (not merely the absence of disease or infirmity) and – after Huber, Knottnerus, Green, et al. (2011) – the ability to adapt and self-manage in the face of social, physical, and emotional challenges. A health system is defined as a formal structure (composed of all organizations, people, and actions whose primary intent is to promote, restore, or maintain health) for a defined population.

Globalization processes influence health through multiple channels: from health systems through financing reforms to migration flows, via trade and investment treaties, labour market, and the spread of unhealthy commodities or through deploying human rights and environment protection treaties, and strengthening health diplomacy efforts, to create more equitable and sustainable global health outcomes (Labonté & Schrecker, 2007).

The studies of the impact of globalization on health are dominated by a disciplinary approach. Here medical sciences (especially epidemiology) take lead followed by economics, geography, sociology, and political science. Most often the impact of globalization on health is presented according to a positive vs negative scheme where the latter prevails. In the vast majority of the publications, globalization is treated homogenously (just as a factor).

There is a limited number of publications on conceptual frameworks addressing the impact of globalization on health systems thus an adequate methodology to analyze this impact remains a challenge (Brown & Labonté, 2011). Huynen, Martens and Hilderink (2005) propose a multi-nature and multi-level framework for population health which is a twelve-field matrix. Although it is extensive, it slightly underestimates the economic dimension of the impact of globalization on public health. A more narrow perspective is used by Brown and Labonté (2011) but their analysis is limited to HIV/AIDS. The so far known proposals are either very extensive or very narrow.

The framework proposed in this article may be considered as a new, more comprehending model of the inflow of globalization on health systems for at least three reasons.

First, globalization is analyzed here as a heterogeneous phenomenon composed of four constituent components: a flow of goods and services, flow of capital, flow of people, and flow of ideas which are linked to directions of the impacts of globalization on health systems. Second, while the economic perspective is spin, a multispecialty approach is necessary to analyze the directions of the impact of globalization on health systems. Such an approach may contribute to minimizing a kind of research gap diagnosed by Murray, Bisht, Baru, et al. (2012). They reported on the dominance of "population health science" perspectives and the relative lack of social science perspectives. This article contributes to filling such a research gap. Third, the impact of globalization on health care systems is presented following the division of health systems into the supply – (resources available by health systems to meet health needs) and demand-side (effective health needs) which is also a new element.

The article aspires to contribute to the response to one of the *big* research questions posed by Axford (2021) i.e. *Should we generate generalizable knowledge about the global in systematic ways that cut across entrenched academic disciplines?* since it touches on economic, political science, international trade, strategic management, and international law perspectives.

The topic of the article can also be perceived as a kind of bridge between the two recent thematic issues of *Horyzonty Polityki* namely Vol. 12, No. 40 ("Covid-19 Pandemic: Challenges for the Polish and European Economy") and Vol. 12, No. 39 ("Globalisation – the Issue of Political Power in the Contemporary World").

1. METHOD AND RESEARCH TOOLS

In this perspective article, the main method used was a meta-analysis where such databases as EBSCOhost (including Health Source and Medline), JSTOR, OECD iLibrary, Open Knowledge Repository and ScienceDirect were explored. The keywords used were: globalization, health, and health system (in various combinations) for the period: 2005–2020. The study selection process was performed in three steps. First, after the elimination of duplications (the results

of a search came from five databases indicated above), the titles of the articles chosen were checked against the goal of the article. Then abstracts of all publications chosen in the first step were studied and compared with the article's s goal. Finally, sixty-seven publications were selected for final analysis. As occurred later, not all of them matched with the topic and goals of the article. A substantive approach to public policy analysis (Lester & Stewart, 2000) was implemented.

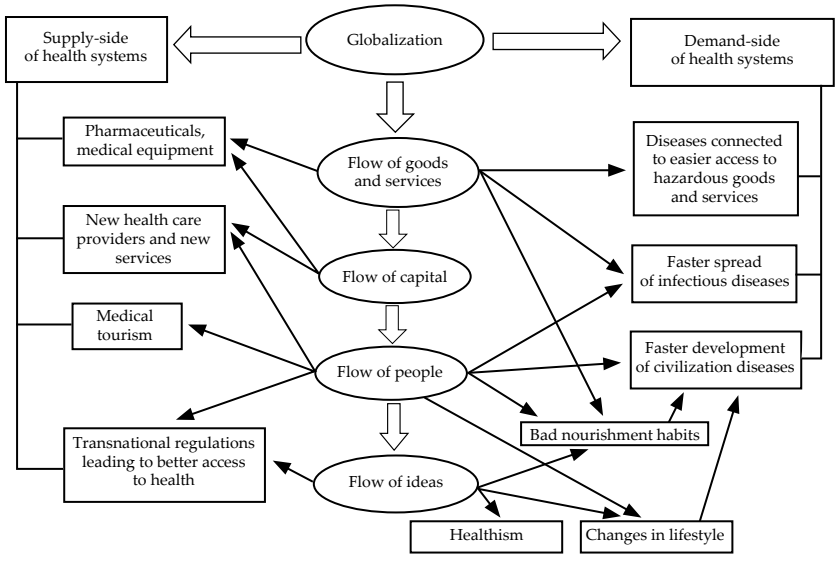
A perspective article requires maximum brevity[2], therefore the content of this article can be seen as an invitation to further discussion. The results of the analysis will not be presented in a formal academic manner as in a classic systematic review (see Agbo, Mahmoud, Eklund, 2019 for comparison), i.e. without tables. Also, the structure of the article does not mirror the standard format of a systematic review.

2. THE IMPACT OF GLOBALIZATION ON HEALTH CARE SYSTEMS

The essence of this article is shown in Fig.1. The findings presented below are used just as illustrations of identified main directions of the impact of globalization on health systems and can be further developed.

2 Also the upper limit of a size of an article submitted to *Horyzonty Polityki* has to be taken into account.

Fig. 1. Globalization impact on supply and demand-side of health systems



Source: author's own based on Klich, 2021, p. 51.

2.1. The impact of globalization on the supply-side of health care systems

The supply-side of health systems is affected mainly by the flow of goods and services, the flow of people, and the flow of capital and may take the following forms.

2.1.1. Better supply of pharmaceuticals and medical equipment

Despite some regulatory (licensing, national drug registration systems, marketing authorization, and reimbursement policy) and budgetary (payers' budgets) constraints one may argue that globalization leads to the increase in the volume of pharmaceuticals (Kanavos, Vandoros, Garcia-Gonzalez, 2009), medical equipment and products of positive influence on health (Goldman, Yee, Holmgren, et al., 2008) available on the market. Such a positive picture may be

somewhat distorted by the tensions that emerged during the first wave of COVID-19 when the growing domestic demand for surgical masks and respirators in China led to a reduction in Chinese exports to other countries (Bradsher & Alderman, 2020). Another negative consequence of shortages could be also „vaccine nationalism" (Zhou, 2021) experienced especially by middle and low-income countries in the first phase of the SARS-CoV-2 pandemic.

2.1.2. New health care providers and new services

The flow of people and growing migration may increase the migration of medical workers to other countries (Schultz & Rijks, 2014). The migration of medical workers mainly nurses and doctors, but also care workers (Misra, Woodring, Merz, 2006)) takes place everywhere, but the main flow comes from less developed to highly developed countries (Suciu, Popescu, Ciumageanu et al., 2017; Schumann, Maaz, Peters, 2019). Such a brain drain impacts negatively migrant-sending countries (Ortiga & Rivero, 2019).

When the migration of people is followed by a flow of capital it may lead to the establishment of new health care providers in new territories, for example, centres of Chinese (acupressure, acupuncture, herbal therapies) or Indian medicine (Ayurveda) in Western countries. These processes are partially supported by the flow of ideas and knowledge about different cultures.

2.1.3. Medical tourism[3]

Migration processes may affect also patients and take the form of medical tourism. This fast-growing business is understood as a journey with the clear aim of obtaining healthcare services abroad (de Arellano, 2007). The reasons for moving abroad for health treatment are most often the high cost of health services in the tourist's home country, waiting lists for scheduled treatments or the unavailability

3 Placing medical tourism on the supply-side of the health care system does not mean that some of its features cannot be placed also on the demand side.

of certain services in the home country (MacReady, 2007). The dominant direction of the flow of the patients is from highly developed to less developed, mainly Asian, countries (Pocock & Phua, 2011) impacting national health systems there (Béland & Zarzeczny, 2018). Among the most favoured medical procedures sought by medical tourists, one may find cosmetic surgery, dentistry, cardiovascular, orthopaedics, cancer, reproductive surgeries, weight loss, cans, tests, and health screening. Medical tourism, especially reproductive tourism (assisted fertility services), rises the tensions between the global marketplace and national policies (Martin, 2009)[4]. Medical tourism is hard to monitor and estimate, and its market value varies considerably from several billion to USD 100 billion yearly (Dang, Nguyen, Wang et al., 2020, p. 2).

2.1.4. Transnational regulations leading to better access to health care

Transnational regulations, originating from the flow of ideas, impact all components of globalization including global health governance (Morin & Blouin, 2019). Among the leading organizations shaping the transnational regulations impacting health care systems are World Health Organization, World Bank (Tichenor & Sridhar, 2017), and the European Union (Wismar, Palm, Figueras et al, 2011). Transnational regulations have a direct impact on access to health care (for example Directive 2011/24/EU) and pharmaceuticals (Pezzola & Sweet, 2016).

2.2. The impact of globalization on the demand-side of health systems

Globalization through the free movement of goods and services and the free movement of people and ideas may lead to increasing demand for health services. Also, the negative effects of globalization on climate can lead to population health problems (Cheng, 2018).

4 Since Poland amended the anti-abortion law in 2019 making it more restrictive, Polish women started travelling to neighbouring countries (mainly to the Slovak Republic) to get abortions.

2.2.1. Diseases connected to easier access to hazardous goods and services

Development of international trade and increasing supply of tobacco (Lee, Carpenter, Challa et al., 2009), alcohol, and highly processed food (Parziale & Ooms, 2019) accompanied by the development of fast-food chains leading to obesity (Fox, Feng, Asal, 2019) and other non-communicable diseases (Baker, Kay, Walls, 2014) are well documented in the literature. There is also some evidence that global trade is linked with the rise of chronic disease in many low and middle-income countries (Labonté, Mohindra, Lencucha, 2011). A separate but very interesting issue is the strategy of globally operated food producers (broadly defined) and its consequences for national economies and individual consumers (Busscher, Colombo, van der Ploeg et al., 2020).

2.2.2. Faster spread of infectious diseases

Free movement of people correlates with the transmission of infectious diseases (Cheng, 2018) and the actual (i.e. at the time of writing) case of the SARS-Cov2 pandemic is a good example[5]. The list of infectious diseases covers also HIV, bird flu, and avian influenza A(H5N1) virus. Movements of people also lead to the spread of local diseases to other continents and areas. The latter can be illustrated by cases of malaria in the USA. In 2019 total of 872 malaria cases in the USA were recorded (Centers for Disease Control and Prevention, 2020). Ebola virus could be also a good example here (Harman & Wenham, 2018).

2.2.3. Faster development of civilization diseases

Diabetes, hypertension, ischemic heart disease, obesity, stroke, heart attack, atherosclerosis, bronchial asthma, allergies, kidney stones,

5 As of December 18, 2021, there were 274 009 990 total COVID-19 cases reported globally and 5 348 943 total deaths (COVID-19 Dashboard, 2021).

osteoporosis, AIDS, tuberculosis, cancer, mental diseases (such as anorexia, neurosis, depression, alcoholism, drug addiction) and gastrointestinal diseases (such as caries, peptic ulcer disease, gastroesophageal reflux disease) commonly known as civilization diseases are connected to changes in lifestyle and diet (Cuevas García-Dorado, Cornselsen, Smith et al., 2019). These changes are fueled mainly by the Westernization of consumption (Kasa, 2008) and the flow of new ideas which may impact negatively lifestyles like gaming and hazard (Luke, 2010) and nutrition habits.

Although the aetiology of the above-mentioned diseases does not allow to link them directly with globalization, the higher incidence of some of these diseases in the population of migrants is documented in the literature (Modesti, Bianchi, Borghi et al. 2014; Ledoux, Pilot, Diaz et al. 2018) thus one may argue that globalization (here: free movement of people) leads to an increase in civilization diseases.

2.2.4. Healthism

One positive example of the flow of ideas globally is healthism defined as „the preoccupation with personal health as a primary…focus for the definition and achievement of well-being; a goal which is to be attained primarily through the modification of lifestyles" (Crawford, 1980, p. 378). The positive influence of healthism notwithstanding, one should acknowledge that when put in the extreme, healthism may lead to orthorexia nervosa (ON), a type of disordered eating understood as pathological healthy eating obsession (Bóna, Túry, Forgácsc, 2019).

3. DISCUSSION

The proposed framework is not free from limitations and weaknesses. First, the identified directions of globalization's impact on health systems (mainly through public health) do not cover for example a level of competition among producers and health care providers. Consequently, such an important factor as the price offered/expected by producers/providers is missing. Second, directions identified on

the demand side are impacted also by other factors. This refers especially to the faster spread of infectious diseases which is determined also by settlement and population characteristics (Sigler, Mahmuda, Kimpton et al., 2020). Also, the aetiology of civilization diseases is connected with other factors. Also, free movement of ideas, changes in lifestyle (the Westernization) and culture could be further developed. Third, health systems are reduced to the supply-demand side thus some other important components (like health prevention and health promotion) are missing. Fourth, the distinction between the supply and demand side of the healthcare system is not always sharp and clear (see medical tourism). Fifth, some other important factors like global governance in general and global health governance in particular, are absent in the article. The latter is of special importance in the era of the fight against the COVID-19 pandemic and the role of WHO in ensuring access to vaccines. The above-mentioned limitations automatically define the topics of further research and may be perceived as an invitation for academic debate leading to necessary adjustments of the proposed framework. One should also acknowledge that the publications mentioned in this article are only examples thus a more rigorous and therefore, extended and in-depth analysis of the available literature is recommended.

4. CONCLUSIONS

Globalization impacts public health on a growing scale and is intensively researched. The proposed framework indicates that the flow of goods and services and the flow of people are the leading channels of the impact of globalization on health systems and allows maintaining that globalization, in the long run, has *per saldo* positive impact on health systems and public health. The leading argument here is that globalization facilitates access to drugs (including innovative ones), modern medical equipment, medical materials and health services. Such a judgement can be questioned especially now, during the COVID-19 pandemic, when the flow of people and social mobility is perceived as the main reason for the spread of the disease. One should keep in mind, however, that the current epidemiological environment is rather an exception, not the rule.

References

Agbo, C.C., Mahmoud, Q.H., & Eklund, M. (2019). Blockchain Technology in Healthcare: A Systematic Review. *Healthcare*, *7*(2), 56. DOI: 10.3390/healthcare7020056.

de Arellano, A.B.R. (2007). Patients without Borders: The Emergence of Medical Tourism. *International Journal of Health Services*, *37*(1), 193–198. DOI: 10.2190/4857-468G-2325-47UU.

Axford, B. (2021) Editorial. *Globalizations*, *18*(5), 683–684. DOI: 10.1080/14747731.2020.1841542.

Baker, P., Kay, A., & Walls, H. (2014). Trade and investment liberalization and Asia's noncommunicable disease epidemic: a synthesis of data and existing literature. *Global Health*, *10*(66). DOI: 10.1186/s12992-014-0066-8.

Béland, D., & Zarzeczny, A. (2018). Medical tourism and national health care systems: an institutionalist research agenda. *Global Health*, *14*(68). DOI: 10.1186/s12992-018-0387-0.

Bóna, E., Túry, F., & Forgácsc, A. (2019). Evolutionary Aspects of a New Eating Disorder: Orthorexia Nervosa in the 21st Century. *Psychological Thought*, *12*(2), 152–161. DOI: 10.5964/psyct.v12i2.356.

Bradsher, K., & Alderman, L. (2020). The World Needs Masks. China Makes Them, but Has Been Hoarding Them. *The New York Times*, March 13, 2020. Retrieved June 18, 2021, from https://www.nytimes.com/2020/03/13/business/masks-china-coronavirus.html.

Brown, G.W., & Labonté, R. (2011). Globalization and its methodological discontents: Contextualizing globalization through the study of HIV/AIDS. *Global Health*, *7*(29). DOI: 10.1186/1744-8603-7-29.

Busscher, N., Colombo, E.L., van der Ploeg, L., Gabella, J.I., & Leguizamón, A. (2020) Civil society challenges the global food system: the International Monsanto Tribunal. *Globalizations*, *17*(1), 16–30. DOI: 10.1080/14747731.2019.1592067.

Cheng, A. (2018). Remote village to metropolis: how globalisation spreads infectious diseases. *The Conversation*. Retrieved January 14, 2021, from https://theconversation.com/remote-village-to-metropolis-how-globalisation-spreads-infectious-diseases-92216.

Centers for Disease Control and Prevention (2020). Center for Surveillance, Epidemiology, and Laboratory Services. National Notifiable Diseases Surveillance System. *Weekly cases of notifiable diseases, United States, U.S. territories, and Non-U.S. Residents* weeks ending July 18, 2020 (Week 29). Table1v Malaria; Measles. Retrieved January 26, 2021, from https://stacks.cdc.gov/view/cdc/90903.

COVID-19 Dashboard (2021). Johns Hopkins University of Medicine. Coronavirus Resource Center. Retrieved December 18, 2021, from https://coronavirus.jhu.edu/map.html.

Crawford, R. (1980). Healthism and the Medicalization of Everyday Life. *International Journal of Health Services*, *10*(3), 365–388. Retrieved June 18, 2021, from http://www.jstor.org/stable/45130677.

Cuevas García-Dorado, S., Cornselsen, L., Smith, R. et al. (2019). Economic globalization, nutrition and health: a review of quantitative evidence. *Global Health*, *15*(15). DOI: 10.1186/s12992-019-0456-z.

Dang, H-S., Nguyen,T-M-T., Wang, C-N., Day, J-D., &Dang, T.M.H. (2020). Grey System Theory in the Study of Medical Tourism Industry and Its Economic Impact. *International Journal of Environmental Research and Public Health 17*, 961. DOI: 10.3390/ijerph17030961.

Directive 2011/24/EU of The European Parliament and of The Council of 9 March 2011 on the application of patients' rights in cross-border healthcare. *Official Journal of the European Union.* 4.4.2011, L 88/45.

Fox, A., Feng, W., & Asal, V. (2019). What is driving global obesity trends? Globalization or „modernization"?. *Global Health*, *15*(32). DOI: 10.1186/s12992-019-0457-y.

Goldman, A.S., Yee. R., Holmgren, C.J. et al. (2008). Global affordability of fluoride toothpaste. *Global Health*, *4*(7). DOI: 10.1186/1744-8603-4-7.

Harman, S., & Wenham, C. (2018). Governing Ebola: between global health and medical humanitarianism. *Globalizations*, *15*(3), 362–376. DOI: 10.1080/14747731.2017.1414410.

Huber, M., Knottnerus, J.A., Green, L, et al. (2011). How should we define health? *British Medical Journal*, *343*, d4163. DOI: 10.1136/bmj.d4163.

Huynen, M.M., Martens, P., & Hilderink, H.B. (2005). The health impacts of globalisation: a conceptual framework. *Global Health*, *1*(14). DOI: 10.1186/1744-8603-1-14.

Kanavos, P., Vandoros, S., &Garcia-Gonzalez, P. (2009). Benefits of global partnerships to facilitate access to medicines in developing countries: a multi-country analysis of patients and patient outcomes in GIPAP. *Global Health*, *5*(19). DOI: 10.1186/1744-8603-5-19.

Kasa, S. (2008). Globalizing Unsustainable Food Consumption: Trade Policies, Producer Lobbies, Consumer Preferences, and Beef Consumption in Northeast Asia. *Globalizations*, *5*(2), 151–163. DOI: 10.1080/14747730802057480.

Klich, J. (2021). *Kreowana i rzeczywista odpowiedzialność państwa. Studium sektora ochrony zdrowia państw postsocjalistycznych*. Warszawa: Wydawnictwo Naukowe SCHOLAR .

Labonté, R. (2018). Reprising the globalization dimensions of international health. *Global Health*, *14*(49). DOI: 10.1186/s12992-018-0368-3.

Labonté, R., Mohindra, K.S., & Lencucha, R. (2011). Framing international trade and chronic disease. *Global Health*, *7*(21). DOI: 10.1186/s12992-014-0066-810.1186/1744-8603-7-21.

Labonté, R., & Schrecker, T. (2007). Globalization and social determinants of health: Promoting health equity in global governance (part 3 of 3). *Global Health*, *3*(7). DOI: 10.1186/1744-8603-3-7.

Ledoux, C., Pilot, E., Diaz, E. et al. (2018). Migrants' access to healthcare services within the European Union: a content analysis of policy documents in Ireland, Portugal and Spain. *Global Health*, *14*(57). DOI: 10.1186/s12992-018-0373-6.

Lee, K., Carpenter, C., Challa, C. et al. (2009). The strategic targeting of females by transnational tobacco companies in South Korea following trade liberalisation. *Global Health*, *5*(2). DOI: 10.1186/1744-8603-5-2.

Lester, J.P., & Stewart J.Jr. (2000). *Public Policy: An Evolutionary Approach*. Australia, United States: Wadsworth Thomson Learning.

Luke, T.W. (2010). Gaming Space: Casinopolitan Globalism from Las Vegas to Macau. *Globalizations*, *7*(3), 395–405. DOI: 10.1080/14747731003669800.

MacReady, N. (2007). Developing countries court medical tourists. *Lancet 369*(9576), 849–1850. Retrieved December 18, 2020, from https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(07)60833-2.pdf

Martin, L.J. (2009). Reproductive Tourism in the Age of Globalization. *Globalizations*, *6*(2), 249–263. DOI: 10.1080/14747730802500398.

Misra, J., Woodring, J., & Merz, S.N. (2006). The globalization of care work: Neoliberal economic restructuring and migration policy. *Globalizations*, *3*(3), 317–332. DOI: 10.1080/14747730600870035.

Modesti, P.A., Bianchi, S., Borghi, C. et al. (2014). Cardiovascular health in migrants: current status and issues for prevention. A collaborative multidisciplinary task force report. *Journal of Cardiovascular Medicine*, *15*(9), 683–692. DOI: 10.2459/JCM.0000000000000069.

Morin, J., & Blouin, C. (2019). How environmental treaties contribute to global health governance. *Global Health*, *15*(47). DOI: 10.1186/s12992-019-0493-7.

Murray, S.F., Bisht, R., Baru, R., et al. (2012). Understanding health systems, health economies and globalization: the need for social science perspectives. *Global Health*, *8*(30). DOI: 10.1186/1744-8603-8-30.

Ortiga, Y.Y., & Rivero, J.A. (2019). Bodies of work: skilling at the bottom of the global nursing care chain. *Globalizations*, *16*(7), 1184–1197. DOI: 10.1080/14747731.2019.1576321.

Parziale, A., & Ooms, G. (2019). The global fight against trans-fat: the potential role of international trade and law. *Global Health*, *15*(46). DOI: 10.1186/s12992-019-0488-4.

Pezzola, A., & Sweet, C.M. (2016). Global pharmaceutical regulation: the challenge of integration for developing states. *Global Health*, *12*(85). DOI: 0.1186/s12992-016-0208-2.

Pocock, N.S., & Phua, K.H. (2011). Medical tourism and policy implications for health systems: a conceptual framework from a comparative study of Thailand, Singapore and Malaysia. *Global Health*, *7*(12). DOI: 10.1186/1744-8603-7-12.

Roudometof, V. (2021). The new conceptual vocabulary of the social sciences: the 'globalization debates' in context. *Globalizations*, *18*(5), 771–780. DOI: 10.1080/14747731.2020.1842107.

Schultz, C., & Rijks, B. (2014). Mobility of Health Professionals to, from and within the European Union. International Organization for Migration (IOM). *IOM Migration Research Series*, *48*. Retrieved December 8, 2020, from https://publications.iom.int/system/files/pdf/mrs48_web_27march2014.pdf.

Schumann, M., Maaz, A., & Peters, H. (2019). Doctors on the move: a qualitative study on the driving factors in a group of Egyptian physicians migrating to Germany. *Global Health*, *15*(2). DOI: 10.1186/s12992-018-0434-x.

Sigler, T., Mahmuda, S., Kimpton, A. et al.(2020). The Socio-Spatial Determinants of COVID-19 Diffusion: The Impact of Globalisation, Settlement Characteristics and Population. *Research Square*. Retrieved February 4, 2021, from https://orcid.org/0000-0002-7789-0916.

Suciu, S.M., Popescu, C.A., Ciumageanu, M.D. et al. (2017). Physician migration at its roots: a study on the emigration preferences and plans among medical students in Romania. *Human Resources for Health*, *15*(6). DOI: 10.1186/s12960-017-0181-8.

Tichenor, M., & Sridhar, D. (2017). Universal health coverage, health systems strengthening, and the World Bank. *British Medical Journal*, *358*, j3347. DOI: 10.1136/bmj.j3347.

Wismar, M., Palm, W., Figueras, J., Ernst, K., &van Ginneken, E. (Eds.) (2011). Cross-border Health Care in the European Union. Mapping and analysing practices and policies. *Observatory Studies Series*, *22*. World Health Organization. Retrieved January 5, 2021, from: https://www.euro.who.int/__data/assets/pdf_file/0004/135994/e94875.pdf.

Zhou, Y.R. (2021): Vaccine nationalism: contested relationships between COVID-19 and globalization. *Globalizations*. DOI: 10.1080/14747731.2021.1963202.